

## II. CLAIM AMENDMENTS

1. (Currently Amended) A telecommunications system, which comprises an office network and an operator network and a local area network between them, wherein the office network comprises:

at least one mobile system terminal,

a base transceiver station,

a radio access gateway controlling the base transceiver station and adapted to have a functional connection with the local area network, and the radio access gateway comprising a traffic handler functionality configured to detect the establishment of an internal data connection in the office network, which data connection uses a GSM protocol and configured to adapt the data transmission protocols TRAU frames of said mobile system and to RTP frames to be used in the local area network to each other,

a call control entity, which is configured to control said radio access gateway through a signalling connection on the basis of information about detection of the establishment of the internal data connection, received from said traffic handler functionality and arranged to detect the establishment of an internal data connection in the office network, which data connection uses a GSM protocol;

a data call interworking function, to which a signalling connection from said call control entity is arranged and which data call interworking function is configured to adapt GSM data connections the RTP frames coming from the radio access gateway to the data protocol according to said office network through at least two data rate adaptations, in response to the call control entity detecting-informing of the establishment of an internal GSM data connection in the office network, at least the second party of the data connection being a GSM terminal, the data call interworking function being further

configured to route the GSM data connections to their destination address in the office network; and

the operator network is configured to adapt data transmission between the office network and a public land mobile network together.

2. (Previously Presented) A telecommunications system as claimed in claim 1, further comprising

a location database for registering terminals belonging to the office network and for managing location and subscriber information,

and in response to a data connection establishment request made by the terminal, the call control entity is configured to authenticate the subscriber of the terminal and alternatively

to direct the radio access gateway to route the data connection to said data call interworking function in response to said subscriber of the terminal being registered into the office network, or

to direct the radio access gateway to route the data connection through the operator network to a switching centre of the public land mobile network in response to the fact that the subscriber of the terminal is not registered into the office network.

3. (Previously Presented) A telecommunications system as claimed in claim 1, wherein said office-specific base transceiver station, radio access gateway and data call interworking function are implemented as one element of the telecommunications system.

4. (Previously Presented) A telecommunications system as claimed in claim 1, wherein

said radio access gateway and data call interworking function are implemented as one element of the telecommunications system in such a manner that the element is configured to control one or more office-specific base transceiver stations.

5. (Previously Presented) A telecommunications system as claimed in claim 1, wherein said office-specific base transceiver station, radio access gateway and data call interworking function are implemented as separate elements of the telecommunication system in such a manner that the radio access gateway is configured to control one or more office-specific base transceiver stations.

6. (Currently Amended) A telecommunications system as claimed in claim 1, wherein said data protocol of the office network is a H.323 protocol, and  
~~the radio access gateway is configured to adapt data frames according to the GSM protocol in the user data into RTP frames and  
the data call interworking function is configured to disassemble said RTP frames and to adapt the user data into frames according to the data protocol of the office network.~~

7. (Previously Presented) A telecommunications system as claimed in claim 1, wherein a remote access server is configured to function as an interface between the office network and the local area network, and the data call interworking function is configured to transmit user data adapted to frames according to the data protocol of the office network to the remote access network.

8. (Original) A telecommunications system as claimed in claim 7, wherein

a terminal registered into the office network is configured to establish a data connection to said remote access server from outside said office network as a dial-up connection.

9. (Original) A telecommunications system as claimed in claim 7, wherein

a terminal registered into the office network is configured to establish a data connection to said remote access server from outside said office network as a virtual private network (VPN) connection.

10. (Currently Amended) A method of establishing a data connection in a telecommunications system which comprises an office network and an operator network and a local area network between them, the office network comprising at least one mobile system terminal, a base transceiver station, a radio access gateway controlling the base transceiver station and adapted to have a functional connection with the local area network, a call control entity, a data call interworking function to which a signalling connection from said call control entity is arranged, the method comprising:

~~controlling said radio access gateway by the call control entity through a signalling connection;~~

detecting the establishment of an internal data connection in the office network by a traffic handler functionality of said radio access gateway~~said call control entity~~, which data connection uses a GSM data protocol,

informing said call control entity about detection of the establishment of the internal data connection,

controlling said radio access gateway by the call control entity through a signalling connection to adapt TRAU frames of said mobile system to RTP frames to be used in the local area network,

adapting data connections according to the ~~GSM data protocol~~RTP frames coming from the radio access gateway to the data protocol according to said office network through at least two data rate adaptations, in response to the fact that the call control entity ~~detects~~informing of the establishment of an internal GSM data connection in the office network, at least the second party of the data connection being a GSM terminal, and adapting the data transmission between the office network and a public land mobile network together in said operator network.

11. (Previously Presented) A method as claimed in claim 10, wherein

the telecommunications system comprises a location database for registering terminals belonging to the office network and for managing location and subscriber information, and the method further comprising

authenticating the subscriber of the terminal in the call control entity in response to the data connection establishment request made by the terminal, and alternatively

directing the radio access gateway to route the data connection to said data call interworking function in response to the fact that said subscriber of the terminal is registered into the office network, or

directing the radio access gateway to route the data connection through the operator network to a switching centre of the public land mobile network in response to the fact that the subscriber of the terminal is not registered into the office network.